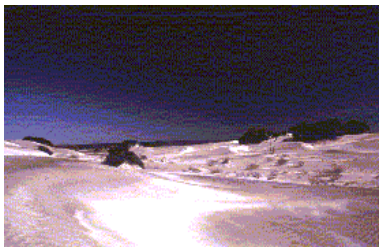
The Electric Tram: An Alternative Fuel Vehicle at Cumberland Island National Seashore



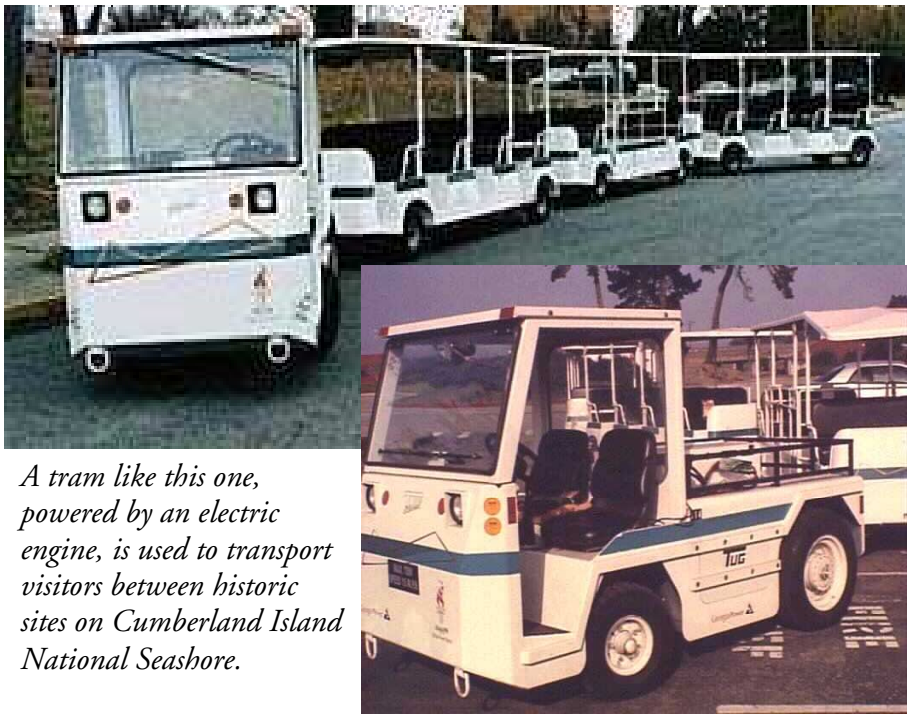
National Park Service Expands Alternative Fuels Fleet

If you're among the millions visiting national parks in the U.S. during the next few years, you'll be breathing a little easier because a growing number of vehicles serving the parks will not be powered by gasoline or diesel fuel. The national parks are adding more vehicles using alternative fuels as part of a federal program to reduce vehicle pollution in those treasured environments.

The program is sponsored by the U.S. Department of Energy (DOE), U.S. Department of the Interior (DOI), DOE's National Renewable Energy Laboratory (NREL), and the National Park Service (NPS). The U.S. Department of Transportation (DOT) contributed to purchasing the electric tram. The objective is to demonstrate how using alternative fuel vehicles (AFV) can improve the environment at the parks, while allowing the vehicles to perform efficiently and cost-effectively.

About the Electric Tram

One of the "cleaner air" vehicles – an electric tram – is being used to transport visitors between historic sites at Cumberland Island National Seashore. Because this vehicle's engine runs on electricity instead of gasoline, the tram will reduce dependence on petroleum supplied by boat to the island. It is also a convenience for visitors, who are not permitted to bring vehicles onto the island.



A tram like this one, powered by an electric engine, is used to transport visitors between historic sites on Cumberland Island National Seashore.

The What & Why of Alternative Fuels

Alternative vehicle fuels include electricity, ethanol, methanol, natural gas, propane, and biodiesel. These fuels are currently powering a variety of commercial, personal, and government vehicles, including heavy-duty long-haul trucks, garbage packers and dump trucks, snow plows, package delivery vans, buses, taxicabs, and passenger cars.

Government agencies and many companies are in partnerships to expand the use of alternative fuels in vehicles. They share the national concern for the environment and recognize the need to reduce the nation's dependence on petroleum from foreign sources. The transportation sector currently accounts for approximately two-thirds of all U.S. petroleum use and roughly one-fourth of the total U.S. energy consumption.

Visit the "clean air" partners

U.S. Department of Energy (DOE), http://www.doe.gov/

DOE's Office of Transportation Technologies, http://www.ott.doe.gov/

DOE's Alternative Fuels Data Center, http://www.afdc.doe.gov/

U.S. Department of the Interior, http://www.doi.gov/

National Park Service, http://www.nps.gov/ or Cumberland Island National Seashore at http://www.nps.gov/cuis/

For additional information about the alternative fuel vehicles used at Cumberland Island National Seashore, contact: Joe Martin, 404-562-3124, ext. 612.

For information about alternative fuels, contact Helen Latham at Battelle, 614-424-4062 or lathamh@battelle.org.

5/2000

Other AFV Locations

Alternative fuels are now being used in nearly 600 light-duty and transit vehicles in national parks and facilities nationwide. In addition to electricity, the alternative fuels powering these vehicles include compressed natural gas (CNG), ethanol, methanol, propane, and biodiesel. The first alternative fuel vehicle in this program – a CNG-powered trash packer – began service in December 1997 at the National Capital Parks' Central District in Washington, D.C.

Here are examples of other parks and facilities participating in this federal program where you can see a heavy- or medium-sized alternative fuel vehicle at work or have the opportunity to ride in one.

Park/Facility Location	Fuel	Vehicle Type
Grand Canyon National Park, AZ	CNG	Dump Truck
Redwood National & State Parks, CA	Electric	Maintenance Truck
Zion National Park, UT	Electric	Tram Engine
Bureau of Indian Affairs Schools, NM	CNG	School Bus
LBJ National Historic Park, TX	Electric	Bus
George Washington National Parkway	CNG	Maintenance Truck

Before the new or re-powered alternative fuel vehicles can be used, facilities at some parks may need to be modified, such as by installing fuel storage facilities and dispensing equipment. Cumberland already has adequate electrical supply systems. People who refuel, repair, or drive the vehicles may need to be trained in using the new fuels. Information is collected to judge the performance of the vehicles, cost-effectiveness, and emission reductions.

Scenes from Cumberland Island National Seashore.